

In the Specification:

Please amend paragraph [0025] of the specification as follows:

[0025] Referring now to Fig. 3, communication system 10 in accordance with a preferred embodiment of the present invention is provided. System 10 may comprise transmitter 14, channel 16, and receiver 18, wherein system 10 may utilize a Partial Response (PR)-Orthogonal Frequency Division Multiplexing (OFDM) signal modulation technique. Transmitter 14 may comprise mapper 22, cyclic convolver 24, serial-to-parallel converter unit 26, Inverse Fast Fourier Transform (IFFT) unit 28, parallel-to-serial converter unit 30, and signal folder with envelope squarer 50. Transmitter 14 transmits the information to receiver 18 through channel 16. Channel 16 may be a noisy channel. Receiver 18 may comprise signal unfold 60, serial-to-parallel converter unit 34, Fast Fourier Transform (FFT) unit 36, parallel-to-serial converter unit 38, Maximum Likelihood (ML) estimator unit 40, and demapper unit 42.

Please amend paragraph [0026] of the specification as follows:

[0026] Information in the form of binary signals are received at transmitter 14 and inputted to mapper 22 for mapping to or encoding in the form of a set of complex numbers drawn from an M-ary alphabet to produce a complex signal, which is then used to modulate or prepare a carrier signal for transmission as discussed in detail below. Transmitter 14 transmits the carrier signal through channel 16 to receiver 18. As the carrier signal, which may be a time based signal, travels through channel 16, which may introduce noise to the carrier signal, such as  $x[n]$ ,

corresponding to a channel impulse response, such as  $h[n]$ , of channel 16. Cyclic convolver unit 24 performs a cyclic convolution on the complex signal. Additionally, ~~prefix-cyclic convolver~~ unit 24 may append a cyclic prefix (CP) at the leading edge or the beginning of the complex signal that also helps compensate for the effects of channel 16 and helps suppress Inter-Symbol Interference (ISI) in each of the low bit-rate sub-channels of the PR-OFDM signal.

Please amend paragraph [0035] of the specification as follows:

[0035] The envelope vector resulting from such a polynomial has a null at each of its extremities. Consequently, the energy at the extremities or the tails of the ~~time-domain-OFDM~~ time symbol-vector is effectively suppressed and can be dropped. Thus, cyclic convolver unit 24 generates a partial response signal with near zero energy at the extremities in the time domain.